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| PATTERSON & SHERIDAN, LLP 3040 POST OAK BLVD SUITE 1500 HOUSTON, TX 77056 | | | EXAMINER LEUNG, WAI LUN | |
| | | | ART UNIT 2613 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/786,175

Applicant(s)

SOULLIERE, MARK J.

Examiner

Danny Wai Lun Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14, 15, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Uemura et al.** (*US006434288B1*), in view of **Kinoshita et al.** (*US007116905B2*).

Regarding claim 14, **Uemura** discloses an automatic protection switching (APS) controller method for OMS shared protection in a ROADM (*18, fig 4*), comprising:

receiving a triggering input signal for protection switching (*col 10, ln 60-67; "detecting the faulty state of the signal"*);

generating a switching command output to a 2x1 switch (*places receiving optical switch 9, fig 4 in the cross state*); and

sending a command to deactivate or reactivate one or more optical receivers (*preparatory terminal units 14 and 20, fig 4*) locally configured to receive extra traffic (*col 10, ln 25-32, units 14 and 20 are normally configured to receive extra traffic thru preparatory path*), wherein under a failure condition, one or more extra traffic receivers are deactivated (*col 11, ln 1-15*). Furthermore, **Uemura** further teaches wherein in the extra traffic being pre-empted under the failure condition (*col 10, ln 50-67; working path being detour, and the preparatory signal is discarded*). **Uemura** does not disclose expressly wherein the switching command is generated

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within an optical supervisory channel, and an OMS signal is looped back within a ROADM to present a drop signal via a broadcast and select module.

Kinoshita, from the same field of endeavor, teaches an automatic protection switching (APS) controller method (*fig 16*) for OMS shared protection in a ROADM (*201, fig 15*), wherein the switching command is generated within an optical supervisory channel (*OSC, col 21, ln 13-15; col 14, ln 62-67*), and an OMS signal is looped back (*col 15, ln 18-27*) within a ROADM (*201, fig 9*) to present a drop signal via a broadcast and select module (*EMS 290, fig 9; col 22, ln 19-30*). Therefore, it would have been obvious for a person of ordinary skill in the art at the time of invention to generate **Uemura's** switching command output to a 2x1 switch within an optical supervisory channel, as suggested by **Kinoshita**, and wherein under a failure condition, one or more **Uemura's** extra traffic receivers are deactivated when an OMS signal is looped back within a ROADM to present a drop signal via a broadcast and select module as suggested by **Kinoshita**. The motivation for doing so would have been to effectively control the switches using optical supervisory channel and loopback OMS signal as suggested by **Kinoshita**, such that a more reliable protection switching can be realized in the event of a fiber cut.

As to claim 15, **Uemura** further teaches wherein in the sending step, comprises the extra traffic being carried on one or more Optical Channels that use spare protection wavelengths under a normal condition (*col 10, ln 25-49*).

As to claim 17, **Kinoshita** further teaches the method further comprising transmitting a message to other nodes via the optical supervisory channel (*col 21, ln 11-25, where NMS 292 communicates between nodes via OSC as shown in fig 15*).

As to claim 18, **Kinoshita** further teaches wherein the receiving step comprises a locally detected signal fault, a manually initiated command, or a bridge request from another node (*col 21, ln 11-43*).

Response to Arguments

3. Applicant's arguments filed 4/30/2007 have been fully considered but they are not persuasive.

4. Applicant argues that **Uemura** does not mention that extra traffic is being pre-empted under the failure condition, but merely discloses that if a fault takes place on a working transmission path, the communication is saved by switching the optical switching system to detour the working path communications to the preparatory path side.

Applicant is reminded that during patent examination, USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim should not be read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily). *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that

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are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.”). see **MPEP § 2106**

While applicant’s specification does not expressly identify what “pre-empted” entails, applicant’s IDS, by **Li et al. (US006414765B1)** teaches that “*When a fault condition is detected, extra traffic is pre-empted by protection switch 10 and the protection wavelengths are used to carry primary traffic until the fault condition has been remedied*”(col 4, ln 60-64). Therefore, it would have been obvious for a person of ordinary skill in the art at the time when the invention was made to interpret **Uemura’s** step of detouring working path and discarding preparatory signal (col 10, ln 50-67) as a “pre-empted” step such as that described by **Li et al.**, and are functionally equivalent to applicant’s invention.

Allowable Subject Matter

5. Claims 1-13 are allowed over prior art as stated in the previous office action.

Conclusion

6. The prior art made of record in previous action(s) and not relied upon is considered pertinent to applicant's disclosure.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Wai Lun Leung whose telephone number is (571) 272-5504. The examiner can normally be reached on 9:30am-9:00pm Mon-Thur.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DWL
June 19, 2007


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